

Poster Session II

descent. None of the treated patients had CDV-related nephrotoxicity, although one patient had severe renal impairment prior to CDV therapy (Table1). CDV is a safe and effective therapy for adenoviral disease in pediatric oncology and BMT patients. We present a novel algorithm that identified patients at high-risk for severe adenoviral disease who would benefit from CDV therapy. In addition to GVHD, we propose HUS may be associated with severe adenoviral disease in this population.

Table 1.

Risk	Cidofovir Therapy	n	Adenovirus Clearance N (%)	Adenoviral-Related Mortality N(%) / RR	Overall Mortality N(%)
HIGH 14(70%)	Treated	9	8 (89%)	1 (11%) 0.14	3 (33%)
	Untreated	5	1 (20%)	4 (80%)	5 (100%)
LOW 6 (30%)	Treated	0	N/A	N/A	N/A
	Untreated	6	6 (100%)	1 (17%)	1 (17%)

recrudescence

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MORTALITY IN BLOOD AND MARROW TRANSPLANTATION: IS THE POSTMORTEM A DYING PROCEDURE?

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Introduction: Little is known about post-mortem (PM) characteristics in blood and marrow transplantation (BMT), including the variables that predict the decision to perform the PM, and whether meaningful information is obtained from the PM. We performed a comprehensive analysis of PMs performed at our center in order to determine PM rates, temporal trends, and the utility of this investigation. **Methods:** All deceased patients since the BMT program inception in 1990 until 2004 were analyzed by computerized database and chart review. Patients (pts) undergoing PM were compared to non-PM deceased pts. PM reports were graded as to whether they showed major, minor, or no disagreement with the ante-mortem diagnoses. PM rates were compared to those of the general hospital population. **Results:** Of the 476 pts undergoing myeloablative BMT, 225 died and 48 (27%) underwent PM, of which 41(85%) were full and 7(15%) limited. The 48 PM pts had a median age of 44 years (range) (18–63) and only 11 (23%) were post autologous BMT. Forty-four PM pts (92%) died either on the transplant ward or the ICU. The performance of a PM was more likely in pts dying <100 days post BMT ($P < .001$), with acute GVHD ($P = .03$), in the ICU ($P < .001$), and after allografting ($P = .001$). PM rates declined significantly between the periods 1990–1994, 1995–1999, and 2000–2004 ($P < .001$). PM was more likely if death occurred outside of office hours ($P = .02$). The PM rate at the general hospital was 21%, and showed a similar downward temporal trend. Major, minor, and no disagreements at PM were present in 22 (46%), 8(17%), and 18 (37%) of cases. **Conclusions:** Despite 46% major disagreement between ante- and postmortem diagnoses, rates for this procedure are falling in concert with an overall reduction of PM in hospitalized pts. Deaths occurring after 100 days post BMT and those outside of a high care setting are less likely to undergo PM. As BMT pts remain complex and liable to an extensive array of treatment and disease-related complications, it is recommended that the PM regains its role as a valuable investigation. This is especially relevant in era of older and more infirm pts undergoing non-myeloablative BMT.

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VALGANCICLOVIR IS EFFECTIVE IN THE PREEMPTIVE TREATMENT OF CYTOMEGALOVIRUS (CMV) INFECTION AFTER ALLOGENEIC STEM CELL TRANSPLANT (ASCT)

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Background: CMV infection can cause life-threatening complications in allogeneic stem cell transplant patients. Preemptive treatment with ganciclovir is effective for patients with CMV infection following ASCT. Valganciclovir is a valine ester of ganciclovir with improved bioavailability. **Methods:** A retrospective analysis of ASCT patients receiving preemptive therapy with ganciclovir or valganciclovir for treatment of CMV infection. CMV infection was defined as a titer of greater than 5 pg/ul using the digene hybrid capture CMV-DNA assay. **Results:** A total of 144 patients received ASCT between January of 2001 and September of 2005. Of these, 39 received preemptive treatment with valganciclovir (21), ganciclovir (13), or a combination of both drugs (5). A total of 13 patients received preemptive therapy with ganciclovir. All 13 patients were seropositive for CMV. Donor source was: bone marrow (bm) = 3, peripheral blood (pb) = 10, match unrelated donors (mud) = 3, matched related sibling (mrs) = 10. Conditioning regimens included: reduced intensity (rit) = 5, ablative = 8. Thirteen of thirteen patients were on steroids for treatment of graft-versus-host disease (GVHD). Patients developed CMV infection on days +4 to +349 (median = 46) after ASCT. The peak CMV-DNA titer was 5.7 to 288 pg/ul (median 48.65 pg/ul). Twelve of thirteen patients responded to treatment. The time to response to treatment occurred 5 to 28 days (median = 13) after initiation of ganciclovir. One patient died from interstitial pneumonitis related to CMV. Six patients received maintenance therapy with valganciclovir and 3 patient developed reactivation of their CMV viremia 69–84 days after their first infection.

A total 21 patients received preemptive treatment with valganciclovir. Donor source was pb = 15, bm 6; mud = 14, mrs = 7. Nineteen patients were seropositive for CMV (2 seronegative patients with seropositive donor). Conditioning regimens included: rit = 6, ablative = 15. Eighteen of twenty-one patients were on steroids for treatment of GVHD. Patients developed CMV infection on days +11 to +700 (median = 32 after ASCT). The peak CMV-DNA titer was 2.1 to 149.3 pg/ul (median = 26 pg/ul). Twenty-one of twenty-one patients responded to preemptive therapy with valganciclovir. The time to response to treatment occurred 3 to 34 days (median = 10) after initiation of valganciclovir. Four patients developed CMV reactivation at 88–127 days after the first infection. **Conclusions:** Valganciclovir is comparable to ganciclovir for the treatment of CMV infection.

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ALTERNATE DAY GANCICLOVIR AND FOSCARNET IS SAFE AND EFFECTIVE IN PREVENTING CYTOMEGALOVIRUS (CMV) INFECTIONS IN AT-RISK PEDIATRIC AND ADOLESCENT ALLOGENEIC STEM CELL TRANSPLANT RECIPIENTS

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CMV prophylaxis with ganciclovir (Gan) post AlloSCT reduces the incidence of CMV disease to $\leq 3\%$, but is associated with a 30% incidence of grade III/IV hematologic toxicity (Goodrich et al NEJM. 1991). Foscarnet (Fos) is effective against CMV, but has dose limiting renal toxicity (Deray et al Am J nephrol. 1989). Combination Gan/Fos is more effective than monotherapy in CMV retinitis in HIV patients (Peters et al J Inf Dis.1994). We evaluated the safety and efficacy of alternate day Gan (5 mg/kg/48H)/Fos (90 mg/kg/48H) in 50 pediatric AlloSCT recipients